**Syllabus for Using Web 2.0 in Science**

**Course Description:**

This class is aimed at Middle School Science teachers and will focus on how to better incorporate web 2.0 tools in the science classroom. Each day of the class will focus on different web 2.0 tools and require the user to collaborate with other teachers in the same grade/content to create products that they can apply in their classrooms. The main objective of this class will be to provide the participants with hands-on practice using these technology tools so that they can apply them in their own classrooms.

**Objectives:**

After completing this weeklong workshop science teachers will be able to:

1. Create effective web 2.0 tools to support the science curriculum
2. Develop a resource wiki which will support their curriculum and improve student learning
3. Embed these tools into webpages and presentations to enhance lessons and improve learning
4. Create collaborative materials that can be used with students or shared with other teachers
5. Develop web 2.0 resources that can be directly implemented in the classroom

**Prerequisites:**

Before beginning the class teachers need to ensure that they have completed the pre-workshop survey that will be emailed to them 2 weeks before class begins.

Additionally they need to:

1. Be familiar with what blogs, wikis, podcasts, screencasts, and Google drive
2. Ensure that their county laptops are running with the most upto date image (again an email will be sent along with the survey, providing directions for checking)
3. Have an updated active directory account which allows them to access the county servers
4. Be familiar with the Middle Science Curriculum
5. Gain access to the Workshop Support Wiki and explore the links and review the introductory videos before each class begins.

**Materials Needed:**

Each day you will need to bring your county provided laptop. In addition you should bring a digital or paper copy of your curriculum as well as copies (can be digital) lessons that you have created over the years based on the curriculum.

Link to the County Curriculum for Middle School Science: <http://www.hcpss.org/academics/science/>

**Schedule**:

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| **Day** | **Topics** |
| Day 1: Blogs and Wikis | 1. Discuss when and how to use blogs and wikis in the science classroom 2. Create a blog and wiki for a specific curriculum topic 3. Post to the class wiki page and contribute to the discussion page |
| Day 2: Pod and Screencasting | 1. Discuss the potential for using audio and video podcasts in the classroom 2. Create a a screen cast aimed at improving student understanding of a science topic 3. Create a video or audio podcast for classroom use |
| Day 3: Using Google Drive | 1. Learn to create share and collaborate in Google Drive 2. Create at least one Google Form to share with the class 3. Participate on discussion page 4. Create a Google spread sheet or presentation related to the science curriculum |
| Day 4: Digital Simulation, virtual fieldtrips, and streaming videos | 1. Discuss and identify how and when to use digital simulations, virtual field trips and streaming video in science classes. 2. Develop lessons using these tools 3. Share lessons via the class wiki |
| Day 5: Putting it all together | 1. Demonstrate understanding of the web 2.0 tools discussed throughout the week by responding to scenarios and examples 2. Teachers will create a presentation sharing their ideas for using web 2.0 in science and sharing it via the class wiki. |

**Additional Information:**

It is highly recommended that you look at the support resources page along with the class wiki before classes begin. You should also watch the introduction videos each and ensure you have the required prerequisite knowledge before each session. If you have specific questions bring them with you to class, you never know others might have the same questions as you.

Finally, for students with disabilities please contact the course instructor if you need additional accommodations or have any questions regarding the class setup.

**Course Evaluation:**

At the end of the class you will be asked to compete a course evaluation form providing us with information about your experiences and how you feel we could better support you in the future. Please take this seriously and provide as much detail as possible. Here is the link to the evaluation:

**Technical assistance:**

Since this is a technology based class you may run into some technical problems if you have any problems or just want to ensure your computer and programs are up to date please contact the technology help desk (410) 313-7004

**Instructor contact information:**

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